Maryland Historical Trust

Maryland Inventory of Historic Properties number: CH-389

Name: 8029/MD 227 over Bays Swamp

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended _____ Eligibility Not Recommended __X____

Criteria: ____A ____B ____C ____D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments: _____

_____

_____

Reviewer, OPS: _Anne E. Bruder_____ Date: __3 April 2001____

Reviewer, NR Program: __Peter E. Kurtze_____ Date: __3 April 2001____

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. CH-388

SHA Bridge No. 8029 Bridge name MD 227 over Pages Swamp

LOCATION:
Street/Road name and number [facility carried] MD 227

City/town Middletown Vicinity X

County Charles

This bridge projects over: Road____ Railway_____ Water X_____ Land ____

Ownership: State X_____ County _____ Municipal _____ Other _____

HISTORIC STATUS:
Is the bridge located within a designated historic district? Yes _____ No X_____
National Register-listed district ____ National Register-determined-eligible district __
Locally-designated district _____ Other _____

Name of district _____

BRIDGE TYPE:
Timber Bridge _____:
Beam Bridge _____ Truss -Covered ___ Trestle ____ Timber-And-Concrete ___

Stone Arch Bridge _____

Metal Truss Bridge _____

Movable Bridge _____:
Swing _____ Bascule Single Leaf __ Bascule Multiple Leaf _____
Vertical Lift _____ Retractile_____ Pontoon _____

Metal Girder_____:
Rolled Girder _____ Rolled Girder Concrete Encased _____
Plate Girder _____ Plate Girder Concrete Encased _____

Metal Suspension _____

Metal Arch _____

Metal Cantilever _____

Concrete ___X_____:
Concrete Arch_____ Concrete Slab X___ Concrete Beam ____ Rigid Frame _____
Other _____ Type Name _____

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DESCRIPTION:

Setting: Urban _____ **Small town** _____ **Rural** X

Describe Setting:

Bridge No. 8029 caries MD 227 over Pages Swamp in Charles County. MD 227 runs east-west, while Pages Swamp flows northeast to southwest. The area around the bridge is partially developed to the west with houses dating from the 1950s to 1970s and forested to the east.

Describe Superstructure and Substructure:

Bridge No. 8029 over Pages Swamp is a single span concrete slab built at an unknown date. The clear span length is 20'-8" and the clear roadway width is 24'-7" between the guardrails. The superstructure, consisting of the slab and the roadway, is in good condition. There is approximately 2-4' of fill overlay on the structure creating a raised and inclined road surface. The underside of the deck has a small area of spalling on the south side over the east abutment with an exposed rebar. W-beam guardrails run along the sides of the bridge. The bridge is not currently posted.

The substructure consists of the abutments and the wingwalls. The abutments have fine vertical and map cracking and minor scour at the waterline. The east abutment is in direct contact with the stream and shows more signs of scour. The wingwalls are short and flared at an approximate 45 degree to the roadway centerline. The top of the southwest wingwall is chipped.

Discuss Major Alterations:

W-beam guardrails were added at an unknown date, possibly replacing original parapets. Approximately 2-4' of fill overlay was also added to the structure to alter the grade of the road.

HISTORY:

WHEN was the bridge built: Unknown

This date is: Actual _____ **Estimated** _____

Source of date: Plaque _____ **Design plans** ____ **County bridge files/inspection form** _____

Other (specify) _____

WHY was the bridge built?

As part of a plan to improve primary and secondary roads and bridges.

WHO was the designer?

Unknown

WHO was the builder?

Unknown

WHY was the bridge altered?

To make the bridge more efficient and to extend the bridge's life.

WAS this bridge built as part of an organized bridge-building campaign?

Yes, all bridges built in the twentieth century were influenced to some extent by state transportation plans.

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SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:
A - Events _____ B- Person _____
C- Engineering/architectural character _____

Was the bridge constructed in response to significant events in Maryland or local history?
Reinforced concrete slab bridges are a twentieth century structure type, easily adapted to the need for expedient engineering solutions. Reinforced concrete technology developed rapidly in the early twentieth century with early recognition of the potential for standardized design. The first U.S. attempt to standardize concrete design specifications came in 1903-1904 with the formation of the Joint Committee on Concrete and Reinforced Concrete of the American Society of Civil Engineers.

Maryland's roads and bridge improvement programs mirrored economic cycles. The first road improvement of the State Roads Commission was a 7 year program, starting with the Commissions establishment in 1908 and ending in 1915. Due to World War I, the period from 1916-1920 was one of relative inactivity; only roads of first priority were built. Truck traffic resulting from war related factories and military installations generated new, heavy traffic unanticipated by the builders of the early road system. From 1920-1929, numerous highway improvements occurred in response to the increase in Maryland motor vehicles from 103,000 in 1920 to 320,000 in 1929, with emphasis on the secondary system of feeder roads which moved traffic from the primary roads built before World War I. After World War I, Maryland's bridge system also was appraised as too narrow and structurally inadequate for the increasing traffic , with plans for an expanded bridge program to be handled by the Bridge Division, set up in 1920. In 1920 under Chapter 508 of the Acts of 1920 the State issued a bond of $3,000,000.00 for road construction; the primary purpose of these monies was to meet the state obligations involving the construction of rural post roads. The secondary purpose of these monies was to fund (with an equal sum from the counties) the building of lateral roads. the number of hard surfaced roads on the state system grew from 2000 in 1920 to 3200 in 1930. By 1930, Maryland's primary system had been inadequate to the huge freight trucks and volume of passenger cars in use, with major improvements occurring in the late 1930's. Most improvements to local roads waited until the years after World War II.

In the early years, there was a need to replace the numerous single lane timber bridges. Walter Wilson Crosby, Chief Engineer, stated in 1906, "the general plan has been to replace these [wood bridges] with pipe culverts or concrete bridges and thus forever do away with the further expense of the maintenance of expensive and dangerous wooden structures." Within a few years, readily constructed standardized bridges of concrete were being built throughout the state.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?
No, this structure did not increase settlement or industry in the area surrounding it.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from the historic/visual character of the potential district?
No, this bridge is not located in an area which is eligible for historic designation.

Is the bridge a significant example of its type?
No, this structure is not a significant example of its type.

Does the bridge retain integrity of important elements described in Context Addendum?
No, this structure does not retain the integrity of its original design because the road has been regraded.

Is the bridge a significant example of the work of a manufacturer, designer, and/or engineer?
No, this bridge is not a significant example of the work of the manufacturer.

Should the bridge be given further study before an evaluation of its significance is made?
State Highway Administration bridge files and inspection reports have not yielded such information. It is not likely that additional information will be available.

BIBLIOGRAPHY:

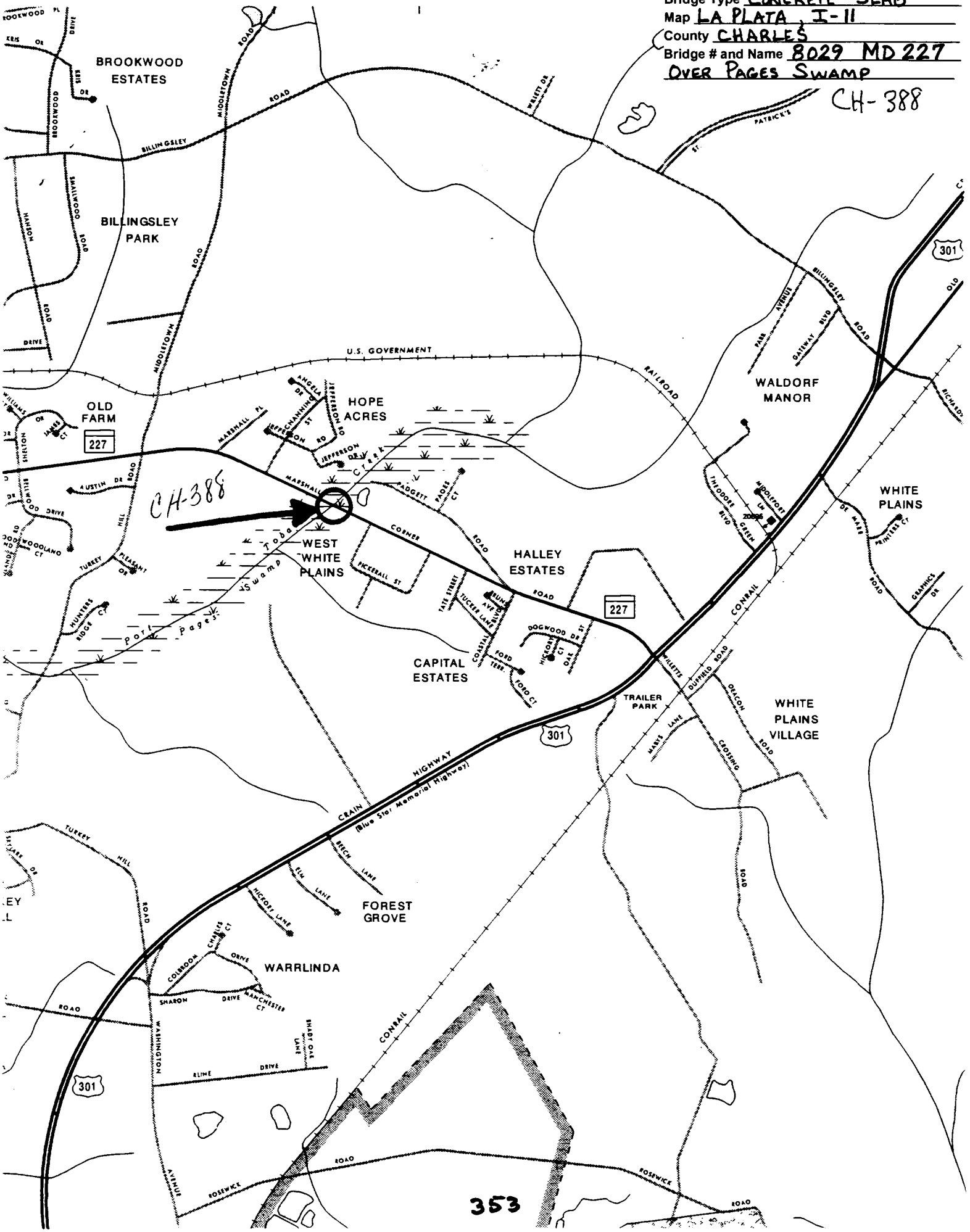
County inspection/bridge files _____ **SHA inspection/bridge files** X
Other (list):

SURVEYOR:

Date bridge recorded 8/11/95
Name of surveyor Timothy J. Tamburrino
Organization/Address P.A.C. Spero & Company,40 W. Chesapeake Avenue,Suite 412,Baltimore, Maryland 21204
Phone number 410-296-1635 **FAX number** 410-296-1670

Maryland Historic Highway Bridges
Bridge Type CONCRETE SLAB
Map LA PLATA, I-11
County CHARLES
Bridge # and Name 8029 MD 227
OVER PAGES SWAMP

CH-388



CH 388

CHARLES COUNTY, MD

TIM BATCHER

8 FEB 1995

~~MARYLAND SHPO~~ SHA

BRIDGE NO. 8029 OVER PAGES SWAMP

VIEW LOOKING EAST ALONG RT 227

1/5

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BRIDGE NO. 8029 OVER PAGES SWAMP
VIEW LOOKING SOUTH

2/5

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BRIDGE NO. 8029 OVER PAGES SWAMP
VIEW LOOKING WEST ALONG RT. 227

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CH 358
CHARLES COUNTY, MD.
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BRIDGE NO. 8029 OVER PAGES SWAMP
VIEW LOOKING NORTH

4/5

CH 388

CHARLES COUNTY, MD.

TIM BATCHER

8 FEB 1995

~~MARYLAND SHPO~~ SHA

BRIDGE NO. 8029 OVER PAGES SWAMP

VIEW LOOKING @ EAST ABUT. AND WINGWALL

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